THOMPSON CREEK PROJECT NUMBER 1 OF BIG CREEK, APPALACHIAN CLEAN STREAMS PROGRAM - SECTION 26A APPROVAL FOR STREAM RELOCATION OF 2,300 FEET OF THOMPSON CREEK, A TRIBUTARY TO THE CLINCH RIVER, CAMPBELL COUNTY, TENNESSEE – ADOPTION OF THE ENVIRONMENTAL ASSESSMENT (EA) PREPARED BY THE UNITED STATES OFFICE OF SURFACE MINING (OSM) AND FINDING OF NO SIGNIFICANT IMPACT (FONSI)

Purpose and Need

The Cumberland Mountain Resource Conservation and Development Council (CMRC&D), a non-profit organization, has submitted an application to OSM for $125,000 from the Appalachian Clean Streams Program and its Watershed Cooperative Agreement Program. These funds would be partnered with funding and in-kind contributions from the Tennessee Department of Environment and Conservation (TDEC), the Tennessee Wildlife Resources Agency (TWRA), the United States Tennessee Valley Authority (TVA), the United States Natural Resources Conservation Service, the Campbell County Soil Conservation District, the TWRA's Royal Blue Wildlife management Area, Friends of Norris Lake, and other local agencies. Total estimated cost of the project from all sources is $280,000.

The project is one phase of a multi-year, multi-project plan to clean up the acid mine drainage affected waters of Thompson Creek and Big Creek Watersheds in Campbell County, Tennessee. This phase proposes to reclaim approximately 20 acres of mine spoil and create a new 2,300 foot stream channel that will divert the uncontaminated water of upper Thompson Creek around acid forming mine spoils. This would minimize the contact between the uncontaminated water and the acid producing material. The project also includes a limited amount of surface reclamation to neutralize acid production and lime additions to existing beaver pond impoundments.

Thompson Creek is a tributary of Ollis Creek which drains into Big Creek in the Clinch River embayment of Norris Reservoir. During the late 1960s and 1970s, the area surrounding upper Thompson Creek was heavily surfaced mined for coal. Many of these mining operations occurred before the Clean Water Act and other laws and regulations were enacted; consequently there was little effort to reduce or avoid acid mine drainage or control sediment pollution of streams. The resultant effects of surface mining in this watershed are a continuous discharge of acid and iron laden water to Thompson Creek which causes the creek to not meet water quality stream standards for pH and iron. Big Creek, which receives water from Thompson Creek, is on the State 303(d) list of impaired streams. The degraded water quality conditions prevent aquatic life colonization which is a primary use of the stream.

The proposed stream channel would return uncontaminated water, flowing parallel to the existing channel, to the lower reaches of Thompson Creek bypassing the spoils that had previously contaminated Thompson Creek. This would reduce the overall acid load of the creek and allow a more effective evaluation of the acid forming remediation activities needed in follow-up phases of the overall project.

As part of its overall mission, TVA has often encouraged and participated in the recovery of abandoned strip mines in the Appalachian Region and currently has active

programs for water quality improvements throughout the Tennessee Valley. TVA's contribution to the project would be technical and professional assistance in the reclamation project and the limestone material to treat the 20 acre site which is worth about $10,000. Additionally, Section 26a approval would be required by TVA for the proposed stream modification.

OSM has prepared an EA to review the impacts of the project to the environment, and issued a FONSI on July 12, 2005 (see attachments). In an August 8, 2005 letter, OSM indicated that they have approved the project as proposed and have entered into a Watershed Cooperative Agreement with CMRC&D.

Alternatives
OSM considered two alternatives: a no action alternative and the applicant's proposed action. Because the projected impacts are insignificant, no other alternatives are evident that would have lesser impacts. TVA believes there is no need to consider additional alternatives.

Affected Environment and Impacts
The proposed project is in the mountains rural setting of Campbell County, Tennessee, near the intersection of Interstate 75 and State Highway 63. The area is heavily forested, primarily by upland forest types with limited commercial and industrial development near the highway intersection. Other than the highways there are few paved roads. There are no farms or residences in the vicinity and the project is entirely on the TWRA Royal Blue Wildlife Management Area. The area is extensively used for recreation such as hunting, fishing, birding, ATVs, and hiking. Numerous species of wildlife typical to the Appalachian Region use the surrounding area including game species such as deer and turkey. The recently reintroduced elk has also been reported to use the surrounding area.

The project site is flat to rolling terrain. The headwaters of Thompson Creek begin in the watershed on the north side of the project area flowing through several beaver ponds and the abandoned mine site to the lower reaches of the creek to the south and southeast.

The project would have no impact to noise, unique soils or air quality, and no historic properties or cultural resources would be affected. There would be minor and temporary impacts to water quality from reclamation activities during the construction of the new stream bed; however the overall impacts would be beneficial with the eventual improvement of the quality of downstream waters as a result of bypassing the acid producing mine spoil. Likewise, there would be temporary impacts to soils and recreation resources that would be enhanced and improved upon completion of the project.

Currently, little aquatic life exists in the contaminated portion of Thompson Creek; completion of the project would improve conditions for aquatic organisms. There are no federal- or state-listed species indicated or found in the project area, therefore the project would have no effect on endangered or threatened species. Clearing for construction of the new stream bed will be minimized. All areas impacted by

construction and reclamation will be planted with wildlife enhancing species. There are no naturally occurring wetlands in the area associated with this project; however, the introduction of beavers has resulted in the creation of some wetland areas around beaver ponds upstream of the project site. These ponds would not be adversely impacted.

There may be some erosion and riparian vegetation loss and resultant impacts upon water quality and aquatic organisms during construction activities. Erosion controls via use of Best Management Practices (BMP) would be implemented to minimize impacts to water quality. These impacts are described in more detail in the attached EA.

Long-term water quality effects from mine reclamation and stream relocation, with implementation of the mitigation measures as proposed, would be negligible. Adherence to erosion control conditions and BMPs required by the U.S. Army Corps of Engineers and TDEC in their permits would ensure that this project does not contribute to a worsening of conditions in Thompson Creek and downstream waters. A stabilized stream bank, mitigative plantings, and reduced mine spoil impacts would over time provide improved water quality, terrestrial habitat diversity, and enhanced aquatic ecosystem functions in the vicinity of this project. Considering past, present, and future proposals, there would be only minimal adverse cumulative impacts associated with the stream relocation and reclamation while the overall cumulative impacts would improve the watershed.

Public and Intergovernmental Review

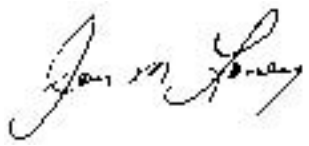
On December 10, 2004, OSM issued a draft EA of the proposed project for agency review. Tennessee Historical Commission (THC) and U.S. Fish and Wildlife Service (USFWS) responded with comments. By letter dated December 22, 2004, the THC indicated that there is no National Register of Historic Places listed or eligible properties affected by the undertaking. In a January 13, 2005, letter to OSM, USFWS indicated that their records showed a federally-listed endangered species, *Myotis sodalist*, (Indiana Bat) occurring within about 7 miles of the proposed project. They explained that there was significant potential for the bat to use the site for feeding and/or roosting activities and suggested that OSM and its partners adhere to standard measures that have been developed for the protection and enhancement of Indiana bat habitat. OSM and partners surveyed the site but found no winter hibernacula and no ponds or wetlands would be impacted by the project. However, as a precaution, OSM decided to limit the removal of potential summer roost trees to winter months and will re-plant with suitable tree species for summer roosting. All comments have been considered and addressed in the attached EA.

Mitigation

USACE will require adherence to BMPs, and sound engineering and construction standards and practices as provided in the Nationwide Permit issued under Section 404 of the Clean Water Act on August 3, 2005, to TWRA for the project. In order to protect and enhance the habitat of the Indiana Bat, OSM will limit the removal of potential summer roost trees to winter months (November 15 and March 31) and suitable tree species for summer roosting will be re-planted in disturbed areas. Appropriate general and standard conditions for TVA Section 26a approval, including adherence to BMP requirements, will also be required to minimize water quality impacts.

Conclusion and Findings

TVA has independently reviewed the OSM EA and found it to be adequate and, therefore, TVA adopts the OSM EA. The relocation of Thompson Creek with mitigation mentioned above, would improve the conditions of the Ollis Creek watershed. Based on the attached EA, including the described reclamation and stream impact mitigation measures, TVA concludes that approval of this reclamation and stream relocation proposal, would not be a major federal action significantly affecting the quality of the environment. Accordingly, an environmental impact statement is not required.



October 26, 2005

Jon M. Loney, Manager
NEPA Administration
Environmental Policy and Planning
Tennessee Valley Authority

Date Signed

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